HANDLE OF SPORTING EQUIPMENT

BACKGROUND OF THE INVENTION

I. Field of the Invention

This invention relates generally to a handle of sporting equipment and, more specifically, to a handle of sporting equipment that composes an elastic sleeve spirally wrapped with a strip externally. A hollow skirt can be turned over is on one end of the elastic sleeve, the hollow skirt can wrap, restrain and press the end of strip firmly to prevent the strip from warping.

II. Description of the Prior Art

Heretofore, it is known that the handle of sporting equipment is to have a functional strip wrap spiral around a hollow elastic sleeve, the combination then is inserted into the end of the shaft of the sporting equipment. Referring to FIG 1, the elastic sleeve composes of a first end, a second end and a main shaft in between. The diameter of the first end is usually slightly larger than that of the second end to make the main shaft in awl shape, the first end is in round cap shape. The adjoined area of the first end and the main shaft has a protruding brim; a semi-circular indentation area is on the main shaft near the first end. The second end is in conical shape and forms externally a blocking area at the adjacent area with the main shaft. The two ends of the strip shrinks into oblique shape, the first end of strip fits into the semi-circular indentation area, the strip wraps spiral around the whole hollow elastic sleeve, the second end of strip ends at the blocking area. The back of the strip is covered with glue to be

fixed on the elastic sleeve. Such technique is to have the edge of last round's strip cover and restrain by this round's strip, the first end of the strip is restrained from warping, however the second end of the strip doest not have the restrained force by the strip, therefore the second end of the strip needs one extra tape (as shown in FIG 2) to fix on the second end of the elastic sleeve.

The extra tape to fix needs skillful technique to accomplish, the extra effort is not that easy and costs more labor, the appearance might not be so smooth. The adhesion force of the tape might be effected by external environment and degrade gradually, and there is no guarantee to assure the end of the strip from warping.

SUMMARY OF THE INVENTION

It is therefore a primary object of the invention to provide a handle of sporting equipment to improve the prior technique to have the edge of last round's strip cover and restrain by this round's strip, to solve short period of adhesion, warping issues and offer a better appearance. The hollow skirt can be turned over is on one end of the elastic sleeve, the hollow skirt can wrap, restrain and press the end of strip firmly to avoid the extra tape and labor along. The wrapping restrained force can last very long, the hollow skirt can be applied repeatedly, a scheme to offer a better technical alternative of the prior art and in lower cost.

In order to achieve the objective set forth, a handle of sporting equipment in accordance with the present invention comprises:

a hollow elastic sleeve further composes a first end, a second

end in conical shape and a main shaft in between, a strip wrapping spiral around the hollow elastic sleeve from the first end to the second end, and

a hollow skirt stretches out from the second end of the hollow elastic sleeve, the hollow skirt can turn over toward the second end and offer a strong restrained force to wrap and press the end of the strip.

BRIEF DESCRIPTION OF THE DRAWINGS

The accomplishment of the above-mentioned object of the present invention will become apparent from the following description and its accompanying drawings which disclose illustrative an embodiment of the present invention, and are as follows:

FIG 1 is a perspective view of the elastic sleeve and the strip of the prior art;

FIG 2 is an assembly view of the elastic sleeve and the strip of the prior art;

FIG 3 is a perspective view of the elastic sleeve and the strip of the present invention;

FIG 4 is a cross-sectional view of 4-4 of FIG 3 of the present invention;

FIG 5 is an assembly view of the elastic sleeve and the strip of the present invention;

FIG 6 is a cross-sectional view of 5-5 of FIG 5 of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The present invention is to have the strip 20 wraps spiral around a hollow elastic sleeve 30, the combination of these two items are spirally wrapped to the end of the shaft (not shown in FIG) of sporting equipments as a handle.

Referring to FIG 3 and FIG 4, the hollow elastic sleeve 30 composes of a first end 31, a second end 32 and a main shaft 33 in between. The diameter of the first end 31 is slightly larger than that of the second end 32 to make the main shaft 32 in awl shape, the first end 31 is in round cap shape. The adjoined area of the first end 31 and the main shaft 33 has a protruding brim 34; a semi-circular indentation area 35 is on the main shaft 33 near the first end 31. The second end 32 is in conical shape and forms externally a blocking area 36 at the adjacent area with the main shaft 33.

The two ends 21,22 of the strip 20 shrinks into oblique shape, the first end of strip 21 is very close to the protruding brim 34; the first end of strip 21 fits into the semi-circular indentation area 35, the strip 20 wraps around the whole main shaft, the second end of strip 22 ends at the blocking area 36. The end of the strip 20, the edges of the protruding brim 34 and the blocking area 36 end evenly.

One side of the second end 32 of the main shaft 30 stretches out and forms a hollow skirt 40, the hollow skirt 40 is elastically and can stretch and shrink, the vertical length of the hollow skirt 40 is longer than the second end 32 of the main shaft 30, the diameter of the open end of the hollow skirt 40 is equal to or slightly smaller than the maximum diameter of the second end 32; an inward neck 41 of the hollow skirt 40 is on the junction with the second end 32. Based on above description, the hollow skirt 40 can turn over toward

the second end 32 and offer strong restrained force.

As shown in FIG 5 and FIG 6, when the strip 20 finishes wrapping, the hollow skirt 40 is turned over toward the second end 32 of the main shaft 30, the inward neck 41 clearly divides the hollow skirt 40 and the second end 32 of the main shaft 30, the division has the hollow skirt 40 turn over and form an brink 411on the open side of the second end 32; the length of the hollow skirt 40 is longer than the second end 32 of the main shaft 30, the hollow skirt 40 not only covers the whole of the second end 32 after turning over, but also wraps the end of the strip 20. The hollow skirt 40 is elastically and the open is smaller than that of the second end 32, the hollow skirt 40 can offer a strong restraint when is turned over to wrap and press the strip 20 firmly.

Compare with the prior art, the hollow skirt 40 can wrap the end of the strip 20 firmly that can save the cost of glue and labor. The hollow skirt 40 can combine the main shaft into one body when it is turned over for a better overall integral and appearance; the hollow skirt 40 offers strong wrapping strength to last for long time and can be applied repeatedly.

While a preferred embodiment of the invention has been shown and described in detail, it will be readily understood and appreciated that numerous omissions, changes and additions may be made without departing from the spirit and scope of the invention.